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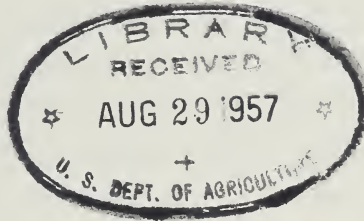
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United States Department of Agriculture
Agricultural Marketing Service
Dairy Division



MINIMUM SPECIFICATIONS
for
APPROVED PLANTS MANUFACTURING,
PROCESSING AND PACKAGING
DAIRY PRODUCTS

Washington, D. C.
December 1955



Information with respect to inspection, grading
and quality control of dairy products in approved
plants may be obtained from

Chief, Inspection and Grading Branch
Dairy Division
Agricultural Marketing Service
United States Department of Agriculture
Washington 25, D. C.

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

SUBPART B
MINIMUM SPECIFICATIONS
FOR APPROVED PLANTS MANUFACTURING, PROCESSING,
AND PACKAGING DAIRY PRODUCTS UNDER UNITED STATES
DEPARTMENT OF AGRICULTURE INSPECTION 1/

(7 CFR, 1946 Supp., 55.101; 20 FR 8444)

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AUTHORITY: §§ 58.101 to 58.195 issued under sec. 205, 60 Stat. 1090; 7 U. S. C. 1624.

1/ Compliance with these specifications does not excuse failure to comply with the provisions of the Federal Food, Drug, and Cosmetic Act.

DEFINITIONS

§ 58.101 *Approved laboratory.* An "approved laboratory" is one in which the entire facilities and equipment have been approved by the Administrator as being adequate to perform the necessary official tests in accordance with the rules and regulations in this part.

§ 58.102 *Approved plant.* "Approved plant" means one or more adjacent buildings, or parts thereof, comprising a single plant at one location in which the facilities and methods of operation therein have been approved by the Administrator as suitable and adequate for operation under inspection or grading service and in which inspection or grading is carried on in accordance with the regulations in this part.

§ 58.103 *Bactericidal treatment.* "Bactericidal treatment" means subjection to an acceptable sanitizing agent.

§ 58.104 *Cream.* "Cream" means that portion of milk, which is produced by healthy cows located in modified tuberculosis-free areas or from cows in herds fully accredited as tuberculosis-free by the United States Department of Agriculture, and which rises to the surface on standing or is separated by centrifugal force and contains not less than eighteen percent of milk fat.

§ 58.105 *Dairy products.* "Dairy products" means butter, cheese (whether natural or processed), milk, cream, milk products (whether dried, evaporated, stabilized or condensed), ice cream, dry whey, dry buttermilk, and such other perishable dairy products as the Secretary may hereafter designate. Such term shall also include any food product which is prepared or manufactured from any of the aforesaid products if such products constitute at least 50 percent, by weight, of all the ingredients used in the preparation or manufacture of such food product. Such food product shall not contain any fats except milk fats and those fats inherent to the food product graded.

§ 58.106 *Grader.* "Grader" means any employee of the Department authorized by the Secretary, or any other person to whom a license has been issued by the Secretary, to investigate and certify, in accordance with the act and this part, to shippers of products and other interested parties the class, quality, quantity, and condition of such products.

§ 58.107 *Inspector.* "Inspector" means any employee of the Department authorized by the Secretary, or any other person to whom a license has been issued by the Secretary, to inspect and certify quality, quantity, and condition of products, supervise the operation in an approved plant and perform plant surveys.

§ 58.108 *Milk.* "Milk" means the whole lacteal secretion, practically free from colostrum, obtained by the complete milking of one or more healthy cows located in modified tuberculosis-free areas or from cows in herds fully accredited as tuberculosis-free by the United States Department of Agriculture.

§ 58.109 *Rules and regulations.* The term "rules and regulations" contained in Subpart A of this part; and all other terms which are used in this subpart shall have the meaning applicable to such terms as defined in said rules and regulations.

§ 58.110 *USDA.* The term "USDA" means the United States Department of Agriculture.

PURPOSE

§ 58.120 *Approved plants operating under USDA inspection.* (a) The minimum specifications established in this subpart provide the basis for a quality improvement program which may be effectively carried forward through official inspection and grading service. Adoption of certain sound practices at dairy plants should significantly aid operators to more consistently manufacture uniform high-quality stable dairy products. Dairy products processed and packaged in an approved plant shall be graded and/or inspected and may be identified with official inspection and/or grade labels. Such standardized dairy products properly labeled and merchandised should encourage greater consumer acceptance and use of dairy products.

(b) This USDA inspection service is provided to dairy plants on a voluntary basis. The operator of any dairy plant desiring to have such plant qualified as an approved plant under USDA inspection service may request a survey of such plant, premises, equipment, facilities, and raw material to determine whether they are adequate to permit plant operation in accordance with the minimum specifications contained in this subpart. The cost of this survey shall be borne by the applicant. The cost of the inspection

service, after inauguration of the program, includes the salary of an inspector(s) or grader(s) plus a prescribed administrative charge.

APPROVED PLANTS

§ 58.122 *Survey and approval.* (a) Prior to the inauguration of USDA inspection and grading service in a plant, a designated representative of the Administrator shall make a survey and inspection of the plant, premises, and raw material, including a general review of the source of supply, volume of raw material processed daily and facilities for handling the raw material at the initial receiving point and the plant, to determine whether the facilities, equipment, method of operation, and raw material being received are adequate and suitable for grading service in accordance with the provisions of this part and such further specifications which may hereafter be issued with respect to minimum requirements, facilities, operating methods and procedures, raw materials, and sanitation in the plant and which are in effect at the time of the aforesaid survey and inspection.

(b) A plant may be designated as an "approved plant" for inspection and grading service only upon compliance with the requirements of this part, and at such time as the management is prepared and has agreed to operate the plant in accordance therewith.

(c) The cost of performing a plant survey shall be borne by the applicant requesting such survey.

§ 58.123 *Suspension of plant approval.* Any plant approval may be suspended for (a) failure to maintain plant and equipment in a sanitary and satisfactory operating condition, (b) the use of unwholesome raw material or use of operating procedures which are not in accordance with the provisions of this part, (c) failure to process or manufacture stable product, (d) failure to maintain legal composition of the finished product, or (e) major alterations of buildings, facilities, or equipment, without prior approval by the Administrator.

PREMISES, PLANT, FACILITIES, EQUIPMENT, AND UTENSILS

§ 58.127 *Premises.* (a) The premises shall be kept in a clean and orderly condition, and should be free from strong or foul odors, smoke-laden or excessive air pollution. Dust in driveways and immediate plant area should be kept to a minimum.

(b) The outside surroundings shall be also free from refuse, rubbish, and waste materials to prevent harborage of rodents, insects, and other vermin.

(c) A suitable drainage system shall be provided to allow rapid drainage of all water from plant buildings and surface water around the plant and on the premises, and all such water shall be disposed of in such a manner as to prevent a nuisance or health hazard.

§ 58.128 *Building.* The building or buildings shall be of sound construction and kept in good repair to prevent the entrance or harboring of insects, rodents, vermin, dogs, and cats. All pipe openings shall be completely cemented or provided with tight metal collars.

(a) *Outside doors, windows, openings, etc.* All openings to the outer air, including doors, windows, skylights, and transoms shall be effectively protected or screened against the entrance of flies and other insects, rodents, dust, and dirt. All outside doors opening into processing rooms shall open outward and be constructed of metal or the bottom edge shall be flashed and edged with sheet metal to a height of six inches. All doors and windows shall be kept clean and in good repair. Outside conveyor openings and other special-type outside openings shall be effectively protected at all times against the entrance of flies and rodents by the use of doors, screens, flaps, fans, or tunnels.

(b) *Walls, ceilings, partitions and posts.* The walls, ceilings, partitions, and posts of rooms in which milk or milk products are processed, packaged, or handled, or in which utensils are washed and stored, shall be finished in suitable light color with smooth washable concrete, tile, cement-plaster, or other easily cleaned material which is substantially impervious to moisture. They shall be kept clean and refinished as often as necessary to maintain them in good repair.

(c) *Floors.* The floors of all rooms in which milk and milk products are processed or packaged or in which utensils are washed shall be constructed of concrete, or of tile laid closely together with impervious joint material, or of other equally impervious and easily cleaned material. They shall be smooth, kept in good repair, sloped so that there will be no pools of standing water after flushing and the drains shall be equipped with traps properly constructed and kept in good repair to avoid foul odors therefrom. The plumbing shall be so installed as to

prevent any back-up of sewage into drain line and to floor of plant.

(d) *Lighting and ventilation.* There shall be ample light, natural or artificial or both, of good quality and well distributed, and adequate ventilation for all rooms and compartments to permit maintenance of sanitary conditions. All rooms where milk or milk products are processed, packaged, or handled, or where utensils and/or equipment are washed should have at least 10 to 30 foot-candles of light intensity on all working surfaces; at least 30 to 50 foot-candles of light intensity in areas where dairy products are examined for condition and quality; and at least 5 foot-candles of light in all other rooms, when measured from a distance of 30 inches above the floor. Light bulbs and fluorescent tubage shall be protected against breakage where necessary. All rooms shall be adequately ventilated to minimize or eliminate objectionable odors and moisture condensation. Exhaust fans, vents, and hoods shall be provided to supplement windows and doors where and when needed.

(e) *Rooms and compartments.* Each room and each compartment in which any raw material, packaging and ingredient supplies, or finished products are handled, processed, or stored shall be so designed and constructed as to assure processing and operating conditions of a clean and orderly character, free from objectionable odors and vapors, and maintained accordingly. Rooms for receiving milk and cream should be separated from processing rooms. Each cold storage room shall possess sufficient and proper refrigeration to adequately protect the quality and condition of the products stored.

(1) *Coolers and freezers.* The coolers and freezers shall be of adequate size and equipped with facilities for proper temperature and humidity conditions consistent with the most desirable commercial practices for the applicable product. Coolers and freezers shall be kept clean, dry, orderly, free from insects, rodents, and mold and maintained in good repair. They shall be adequately lighted and proper circulation of air shall be maintained at all times. The floors, walls, and ceilings shall be constructed of impervious material to permit thorough cleaning.

(2) *Cheddar cheese drying room.* The cheddar cheese drying room shall be sufficiently large to permit holding of cheese prior to waxing for sufficient time to provide a smooth thoroughly dry sur-

face—generally 48 to 72 hours is required. The drying room shall be kept clean and free from mold and shall be equipped with facilities for proper air circulation, control of temperature and relative humidity. There shall be ample shelving, properly spaced, and the shelves so constructed to permit easy cleaning. The shelves shall be kept clean and dry.

(3) *Dry storage (product).* The storage rooms for the dry storage of product shall be adequate in size, kept clean, dry, orderly, free from insects and mold and maintained in good repair. They shall be adequately lighted and ventilated. Control of humidity and temperature shall be maintained at all times consistent with good commercial practices which will not impair the quality of the finished product.

(4) *Supply room.* The supply rooms used for the purpose of storing packaging materials, containers, and miscellaneous ingredients shall be kept clean, dry, orderly, free from insects, rodents and mold, and maintained in good repair. Such items stored therein shall be adequately protected from dust, dirt, or other extraneous matter and so arranged as to permit cleaning, inspection, and spraying. The rooms shall be adequately lighted and ventilated.

(5) *Boiler, compressor, and tool rooms.* The boiler and tool rooms shall be separated from other rooms where milk and milk products are processed, manufactured, packaged, handled, or stored. The rooms shall be adequately lighted and ventilated. Ammonia compressors should be so located as to prevent any ammonia leakage from damaging milk or milk products.

(6) *Toilet and dressing rooms.* Adequate toilet and dressing room facilities shall be conveniently located but shall not open directly into any room in which milk, milk products, or ingredients are processed, packaged or stored. The toilet rooms shall be well lighted and ventilated by openings to the outer air. The toilet rooms and fixtures shall be kept clean and in good repair. The doors of all toilet rooms shall be self-closing. All employees shall be furnished with a locker or other suitable facility and the dressing rooms shall be kept clean and orderly. A durable, legible sign or signs shall be posted conspicuously in each toilet or dressing room directing employees to wash their hands before returning to work.

(7) *Grading room.* A separate grading room or designated area shall be provided for the inspection and grading of

finished products. The grading room or area shall be suitably located, sufficient in size, well lighted, ventilated and the temperature range should preferably be between 60 and 80° F. and shall not be below 50° F. It shall be kept clean and dry, free from foreign odors and reasonably free from disturbing elements which would interfere with proper concentration by the grader. The grading room or area shall be equipped with a table or desk and facilities for washing hands.

(8) *Inspector's office.* An office shall be provided for official purposes. The room shall be conveniently located, adequate in size, and equipped with desk, storage supply cabinet, and clothes locker. It shall be well lighted, ventilated, heated, and custodial service furnished.

(9) *Laboratory.* (i) An adequate laboratory shall be maintained and properly staffed with trained and qualified personnel for control and analytical purposes. It shall be located reasonably close to the processing activity in a well-lighted and ventilated room of sufficient size to permit proper performance of the tests necessary in evaluating the raw and finished products. An approved central control laboratory serving several plants will be acceptable if conveniently located and samples and results of tests can be transmitted without undue delay.

(ii) Adequate equipment and facilities shall be provided for performing the required tests as determined by the nature and variety of dairy products processed. If the laboratory is to qualify as an "approved laboratory" it shall meet the requirements as set forth in § 58.101.

§ 58.129 *Facilities*—(a) *Water supply.*

(1) There shall be an ample supply of both hot and cold water; and the water shall be of safe and sanitary quality with adequate facilities for its proper distribution throughout the plant and protection against contamination and pollution. Bacteriological examination should be made of the water supply at least twice a year, or as often as necessary, to determine purity and suitability for use in processing or manufacturing of dairy products. Such tests shall be made by a USDA or State agency laboratory or other approved laboratory and the results shall be kept on file at the plant for examination by the inspector.

(2) The location, construction and operation of the well shall comply with applicable local or State regulations.

(b) *Drinking-water facilities.* Drink-

ing-water facilities of a sanitary type shall be provided in the plant and so located as to be convenient for employee use.

(c) *Hand-washing facilities.* Convenient hand-washing facilities shall be provided, including hot and cold running water, soap, or other detergents, and approved sanitary towels. Such accommodations shall be located in or adjacent to toilet and dressing rooms and also at such other places in the plant as may be essential to the cleanliness of all personnel handling products. Self-closing metal containers shall be provided for used towels and other wastes. Vats for washing equipment shall not be deemed satisfactory as hand-washing facilities for personnel.

(d) *Disposal of wastes.* Dairy waste shall be properly disposed of from the plant and premises. The sewage system shall have sufficient slope and capacity to readily remove all waste from the various processing operations. Containers used for the collection and holding of wastes, in the processing rooms, shall be kept covered or be of the self-closing type. Outside trash containers shall be constructed of metal and kept covered with tight-fitting lids and placed on a concrete slab or on a rack which is at least 12 inches above the ground. Solid wastes shall be disposed of daily and the containers cleaned before reuse.

§ 58.132 *Equipment and utensils*—

(a) *Construction, repair and installation of equipment and utensils.* The equipment and utensils, including sanitary pumps, piping, fittings and connections, coming in contact with raw material and product shall be made of stainless steel. Other non-corrosive material which will not adversely affect the product also may be approved. Churns of wood construction may be temporarily approved if the wood is in sound condition. All equipment, utensils and piping shall be installed so as to be easily accessible for cleaning and shall be kept in good repair and free from cracks and corroded surfaces. The equipment, where applicable, should be set out approximately 24 inches from any wall and spaced approximately 24 inches between pieces of equipment which measure more than 48 inches on the parallel sides. Cleaned-in-place sanitary piping properly constructed of suitable material and properly installed will be acceptable.

(b) *New equipment and replacements.* New equipment and replacements where applicable shall meet the 3A Standards

formulated by the International Association of Milk and Food Sanitarians, United States Public Health Service, and the Dairy Industry Committee. If 3A specifications are not available, such equipment and replacements shall be approved by the Administrator.

(c) *Contract specifications.* Where contract specifications specifically require stainless steel equipment and utensils in the processing, manufacturing or repackaging of any dairy product such specifications shall take precedence and govern the operation.

(d) *High temperature short time pasteurizers.* An approved automatic flow diversion valve and holding tube or its equivalent, if not a part of the existing equipment, should be installed on all HTST pasteurization equipment, including vacuum type pasteurizers, to assure complete pasteurization. When vacuum type pasteurizers are used the steam shall be conducted through a steam strainer and a steam purifier equipped with a steam trap. Such pasteurizing facilities shall yield a negative phosphatase test on milk or cream.

(e) *Thermometers and recorders—*

(1) *Indicating thermometers.* (i) Long stem indicating thermometers which are accurate within 0.5° F. plus or minus for the applicable temperature range shall be provided for the purpose of checking temperatures of pasteurization and/or cooling of products in vats and for checking the accuracy of recording thermometers.

(ii) Short stem indicating thermometers which are accurate within 0.5° F. plus or minus for the applicable temperature range shall be installed in the proper stationary position in all HTST pasteurizers and all storage tanks where temperature readings are required.

(iii) Air-space indicating thermometers, where applicable, which are accurate within 1.0° F. plus or minus for the proper temperature range shall also be installed above the surface of the products pasteurized in vats, to make certain that the temperature of the foam and/or air above the products pasteurized also received the required minimum temperature treatment.

(2) *Recording thermometers.* Recording thermometers which are accurate within 1.0° F. plus or minus (2.0° F. at high temperatures) for the applicable temperature range shall be used on all vats or HTST equipment used for pasteurizing any milk or milk products to record the temperature and time held.

Other recorders may be necessary where a record of temperature or time of cooling and holding is of significant importance. For more detailed specifications as to type, accuracy of installation of thermometers or recorders, the specifications as outlined by the United States Public Health Service Milk Ordinance and Code shall apply.

(f) *Heavy-duty vacuum cleaner.* Each plant should be equipped with a heavy-duty industrial vacuum cleaner and regular schedules established for thoroughly vacuuming applicable equipment and areas in the plant. The material picked up by vacuum cleaners shall be disposed of promptly.

PERSONNEL, CLEANLINESS AND HEALTH

§ 58.135 *Cleanliness.* All employees shall wash their hands before beginning work and upon returning to work after using toilet facilities, eating, smoking, or otherwise soiling their hands. They shall keep their hands clean and follow good hygienic practices while on duty. Expectoring or use of tobacco in any form, shall be prohibited in each room and each compartment, including the grading room or area, where any unpacked or exposed dairy products are prepared, processed, or otherwise handled. Clean, white, or light-colored washable outer garments, and caps (paper caps or hair nets acceptable) shall be worn by all persons engaged in receiving, testing, processing, or packaging any dairy products.

§ 58.136 *Health.* No person afflicted with any communicable disease (including, but not being limited to, tuberculosis) shall be permitted in any room or compartment where dairy products are prepared, processed, or otherwise handled. No person who has a discharging or infected wound, sore, or lesion on hands, arms, or other exposed portions of the body, shall work in any dairy processing rooms, or in any capacity resulting in contact with dairy products. All plant employees shall have a medical and physical examination by a registered physician or by the local department of health and each new employee should be examined and furnish a satisfactory medical certificate prior to starting work. Thereafter, every employee whose work brings him in contact with the processing or handling of milk, milk products, containers, or equipment should have a medical and physical examination at least once each 24 months. Employees returning to work following illness from communicable diseases shall

have a certification from the attending physician to establish proof of complete recovery. A medical certificate for each employee should be on file at the plant office.

SPECIFICATIONS FOR RAW MILK AND FARM SEPARATED CREAM

§ 58.142 *Transportation and protection of raw material while in transit—*

(a) *Milk and cream cans.* The milk and cream cans used in transporting milk or cream from farm to plant shall be of such construction as to be easily cleaned and kept in good repair. Covers providing adequate protection to the product shall be used. Inspection, repair, or replacement of cans and lids shall be adequate to substantially eliminate the use of cans and lids showing open seams, cracks, rust condition, milkstone or any unsanitary condition.

(b) *Bulk farm tanks.* All bulk farm tanks shall meet 3A Standards for construction at the time of installation and shall be installed in accordance with all local and state regulations. The tanks shall be designed and equipped with refrigeration so as to permit the cooling of the milk to 40° F. or lower within two hours and maintained below 45° F. until picked up. The milk shall be transferred from tank to truck through stainless steel piping or approved hose under sanitary conditions which will not detract from the established quality of the milk in the tank.

(c) *Transporting raw material.* All vehicles used for the transportation of raw material shall be constructed and operated to protect the product from extreme temperatures, dust, or other adverse conditions. Facilities shall be provided for adequate washing and sanitizing of tanks, piping, and accessories, at central locations, or at all plants receiving or shipping milk or milk products in tanks.

§ 58.143 *Specifications for raw milk.* The inspection of the raw milk for manufacturing or processing into dairy products under this part shall be based on the organoleptic examination and quality control tests for sediment content and bacterial estimate, as set forth in paragraphs (a), (b), and (c) of this section, at such time and place as is applicable for the tests performed.

(a) *Organoleptic examination.* All raw milk delivered at the approved plant shall be identified as to the producer, seller, or shipper from whom received. Each can or farm tank of milk shall be examined for physical characteristics,

off-flavors, or off-odors, including those associated with developed acidity. The quality of the raw milk shall be wholesome and characteristic of normal milk. The flavor and odor of the raw milk shall be fresh and sweet and practically free from off-flavors or off-odors; however, normal feed flavors may be present. Any raw milk that shows an abnormal condition (including, but not being limited to curdled, ropy, clotted, bloody, or contains extraneous matter), or which shows significant bacterial deterioration shall be rejected to the producer, seller, or shipper and shall not be used in the processing or manufacturing of dairy products.

(b) *Sediment content classification.*

(1) For the purpose of quality control and establishing a rejection level of the milk to the producer the following classifications of the milk for sediment content shall be applicable:

Sediment (off-the-bottom method):

Class 1—USDA Sediment Standard (not to exceed) 0.50 mg.

Class 2—USDA Sediment Standard (not to exceed) 1.00 mg.

Class 3—USDA Sediment Standard (not to exceed) 2.50 mg.

(2) At least twice each month, at irregular intervals, one can of milk from each producer shall be selected at random and tested for sediment content by the "off-the-bottom" method of sediment testing as set forth in the latest edition of "Standard Methods for the Examination of Dairy Products" published by the American Public Health Association, 1790 Broadway, New York, New York. If the sediment disc on the can of milk selected at random is classified Class 3 (2.50 mg.) or more, as determined on the basis of the United States Sediment Standards for Milk and Milk Products (Part 43 of this title), all cans of milk in the shipment shall be tested for sediment content. In the case of milk held in bulk farm tanks a representative sample shall be taken by an acceptable and approved method for sediment testing, which will yield results comparable to the "off-the-bottom" method of sediment testing for individual cans, and properly classified in accordance with the aforementioned United States Sediment Standards for Milk and Milk Products.

(c) *Bacterial estimate classification.*

(1) For the purpose of quality improvement and establishing a quality pattern for producers the following classification of the milk for bacterial estimate shall be applicable:

Bacterial estimate classification	Direct microscopic (clump) count	Methylene blue test, mixed sample not de-colored in—	Resazurin test, no color change beyond color represented by—
Class 1.....	200,000 per milliliter.....	5½ hours.....	P-7/4 in 2¾ hours.
Class 2.....	3,000,000 per milliliter.....	2½ hours.....	P-7/4 in 1½ hours.
Class 3.....	10,000,000 per milliliter.....	1 hour.....	P-7/4 in ¾ hour.

(2) At least twice each month a bacterial estimate shall be made on a mixed sample of each producer's milk by the methylene blue test, the resazurin test, the direct microscopic (clump) count or its equivalent as set forth in the latest edition of "Standard Methods for the Examination of Dairy Products," published by the American Public Health Association, 1790 Broadway, New York, New York.

(3) Weekly rechecks should be made on Class 3 milk until the milk has improved to Class 2 or better.

(d) *Acceptable milk.* Milk acceptable pursuant to the requirements of paragraph (a) of this section for organoleptic examination and complying with Class 1 or Class 2 for sediment content may be used in the processing or manufacturing of dairy products. For stabilized (sterilized) whole milk to be officially identified with USDA inspection legend the bacterial estimate of the raw milk shall not exceed 500,000 per ml. by the direct microscopic clump count or its equivalent, and the sediment shall not exceed Class 2, applicable to the individual producer's milk. For stabilized (sterilized) whole milk not bearing the USDA inspection legend, the bacterial estimate of the raw milk from individual producers, and sediment, shall be in accordance with either Federal or Military specifications and/or other purchase contract requirements, whichever is applicable.

(e) *Probational milk.* Milk acceptable pursuant to the requirements of paragraph (a) of this section for organoleptic examination but classified as Class 3 for sediment content may be used in processing or manufacturing of dairy products for a period of 10 days with respect to sediment content. When any producer's milk is classified as probational for sediment or Class 3 or more for bacterial estimate a plant representative shall visit the farm and assist the producer in correcting the unsatisfactory condition. If the quality of the milk, as determined by further testing of each can of a producer's milk for sediment content, has not improved within the probational period to Class 2, or better, the plant shall reject the

milk to the producer.

(f) *Rejected milk.* The milk from a producer who has failed to improve the quality of his milk during the probational period so as to meet Class 2, or better, for sediment, shall be rejected milk. Any further acceptance of milk from such a producer shall be on the basis of testing each shipment for sediment content prior to acceptance to determine if the milk is Class 2, or better. When three consecutive shipments within the next 5 days indicate milk of Class 2, or better, the milk from this producer may again be accepted, subject to regular periodic testing and quality control measures. If within five days three consecutive shipments fail to meet the requirements of Class 2, for sediment, the milk from this producer shall again be classified as reject milk and the plant shall not accept milk from this producer until a representative of the plant again visits the farm and has determined that the unsatisfactory condition has been corrected.

(g) *Unacceptable milk.* The plant shall reject to the producer all milk that fails to meet the requirements of paragraph (a) of this section for organoleptic examination and/or is lower in quality than Class 3 for sediment on any single shipment.

(h) *Field service.* A representative of the plant should arrange to visit promptly each producer involved in the production of probational or rejected milk for the purpose of inspecting the equipment, utensils, and facilities at the farm and to offer constructive assistance for improvement in the quality of the milk. A representative of the plant should visit each producer as often as is practicable to assist in and encourage the production of high quality milk.

(i) *Bulk milk.* Bulk milk in storage tanks within the processing plant or receiving station shall be maintained at a temperature of 45° F. or lower until processed. Quality checks for bacterial estimate and flavor shall be made daily to make certain that the quality of the milk in the tanks is consistent with the milk received from the producers as shown by plant records.

(j) *Records.* Accurate plant records, listing the results of quality tests made on raw milk, shall be maintained on each producer's milk. Each producer shipping probational or reject milk shall be informed immediately of the results of such quality tests. Producers shipping Class 1 and Class 2 milk should receive such information at the time of regular remittances. Records shall also be maintained on each bulk milk lot. Such records shall be available for examination by the inspector and kept on file for at least one year.

§ 58.144 *Specifications for farm-separated cream.* The inspection of the farm-separated cream to be used for manufacturing or processing into dairy products under this part shall be based on the organoleptic examination and quality control tests to determine sediment content of each individual producer's cream at the time of delivery thereof at the receiving plant or substation.

(a) *Organoleptic examination.* All cream received at the approved plant, receiving plant, or substation shall be identified as to the producer, seller, or shipper from whom received. Each can of cream in each shipment shall be examined for physical characteristics, off-flavors and off-odors, including those associated with developed acidity. The condition of the cream shall be wholesome and characteristic of normal cream. The organoleptic examination and segregation of the cream, which is used in the manufacturing or processing into butter, shall be consistent with the applicable flavor classification of butter set forth in the U. S. Standards for Grades of Butter (Part 63 of this title). Any cream having pronounced or offensive off-flavors or off-odors, or which is in an abnormal condition (including, but not being limited to surface mold, foamy, yeasty, fruity, or containing extraneous matter), or which is otherwise unwholesome, shall be rejected to the producer, seller, or shipper and shall not be used in the processing or manufacturing of dairy products.

(b) *Sediment content classification.*

(1) For the purpose of quality control and establishing a rejection level of cream to the producer, seller, or shipper, the following classifications of cream for sediment shall be applicable:

Sediment (off-the-bottom method):

Class 1—USDA Sediment Standard (not to exceed) 0.50 mg.

Class 2—USDA Sediment Standard (not to exceed) 1.00 mg.

Class 3—USDA Sediment Standard (not to exceed) 2.50 mg.

Sediment (mixed-can method):

Class 1—USDA Sediment Standard (not to exceed) 0.20 mg.

Class 2—USDA Sediment Standard (not to exceed) 0.30 mg.

Class 3—USDA Sediment Standard (not to exceed) 1.00 mg.

(2) At least twice each month one can of cream from each producer, seller, or shipper of farm separated cream shall be selected at random and tested by using the "off-the-bottom" method or the "mixed-can" method in accordance with acceptable and approved procedures.

(3) As a supplement to the regular sediment testing procedure it is recommended that whole-can filtering facilities be utilized for each can of each shipment of cream from the producer for coarse sediment or extraneous matter and rejections be made in accordance with State or Federal Food and Drug Administration practices.

(c) *Acceptable cream.* Cream acceptable pursuant to the requirements of paragraph (a) of this section for organoleptic examination and complying with Class 1 or Class 2 for sediment content may be used in the processing or manufacturing of dairy products.

(d) *Probational cream.* Cream acceptable pursuant to the requirements of paragraph (a) of this section for organoleptic examination but classified Class 3 for sediment content may be accepted for processing in an approved plant for three successive deliveries. Thereafter each successive delivery shall be tested for sediment content prior to acceptance. If the sediment content is in excess of Class 2, such cream shall be rejected to the producer, seller, or shipper, and successive deliveries shall continue to be rejected until the sediment content is Class 2, or better. As soon as any shipment of cream is classified as probationary a representative of the plant, receiving plant, or substation should contact the producer, seller, or shipper involved in the production of probational cream and, if necessary, arrange to inspect the equipment, utensils, and facilities at the farm, receiving plant, or substation and to offer constructive assistance for improvement in the quality of the cream.

(e) *Rejected cream.* (1) The cream from a producer, seller, or shipper who has failed to improve the quality of his cream during the probationary period so as to meet the requirements of Class 2, or better, for sediment shall be rejected cream. Any further acceptance of

cream from such a producer, seller, or shipper shall be on the basis of testing each shipment for sediment content, prior to acceptance to determine if the cream is Class 2, or better. If all cans of cream of the subsequent shipment meet Class 2, or better, such cream shall be classified as probational cream. When three successive shipments indicate cream of Class 2, or better, the cream may again be accepted, subject to regular periodic testing and quality control measures.

(2) If the initial new shipment fails to meet the requirements of Class 2 cream, or better, the plant shall not accept such cream until a representative of the plant again contacts the producer, seller, or shipper for the purpose of offering constructive assistance in correcting the unsatisfactory condition.

(f) *Field service.* A representative of the plant should arrange to contact promptly each producer, seller, or shipper involved in the production of probational or reject cream for the purpose of offering constructive assistance for the improvement in the quality of the cream. If necessary, he should arrange to inspect the equipment, utensils, and facilities at the farm, receiving plant, or substation. A representative of the plant should visit each producer, seller, or shipper as often as is practicable to assist in and encourage the production of high quality cream.

(g) *Records.* Accurate plant records listing the results of quality tests made on raw cream shall be maintained on cream from each producer, seller, or shipper. Each producer, seller, or shipper, shipping probational or rejected cream, shall be informed immediately of the results of such quality tests. Producers, sellers, or shippers, shipping Class 1 and Class 2 cream should receive such information at the time of regular remittances. Such records shall be available for examination by the inspector and kept on file for at least one year.

§ 58.147 *Alternate quality program.* When a processor has in operation an acceptable quality program, at the producer level, which is approved by the Inspection and Grading Branch, Dairy Division, Agricultural Marketing Service, as being effective in obtaining results comparable to or higher than the quality program as outlined above for milk or cream, then such a program may be accepted in lieu of the program herein prescribed.

OPERATIONS AND OPERATING PROCEDURES

§ 58.150 *Clean and sanitary methods.* All operations in receiving, transporting, segregating, holding, processing, packaging, and storing of dairy products shall be strictly in accordance with clean and sanitary methods and shall be conducted rapidly, and consistent with best commercial practices.

§ 58.151 *Segregation of raw material.* The milk and cream received at an approved plant shall meet the quality specifications as listed under §§ 58.143 and 58.144. The milk and cream received at an approved plant should be segregated and processed separately in such a manner that the finished dairy product will fully meet the requirements of a particular U. S. Grade or other specification, whichever is applicable.

§ 58.152 *Raw material deterioration.* Raw materials shall be held under conditions and at temperatures that will retard any material increase in bacterial content to avoid any deterioration or contamination of such products.

§ 58.153 *Milk or cream storage.* Incoming milk or cream shall be handled in such a manner to minimize bacterial increase during the receipt of the milk or cream and during the holding period prior to processing.

§ 58.158 *Pasteurization.* Pasteurization of the raw material shall be accomplished at the plant where the milk or cream is processed.

(a) *Cream for butter making.* The pasteurization of cream for butter making shall be at a temperature of not less than 165° F. for at least 30 minutes for the holding method, or not less than 185° F. for at least 15 seconds for the flash method, or any other temperature and holding time which will assure adequate pasteurization and comparable keeping-quality characteristics. If vat or holding method is used vat covers are to be closed prior to holding period to assure temperature of air space reaching the minimum temperature before holding time starts.

(b) *Milk for cheese making.* Pasteurization of milk for cheese making shall be at a temperature of at least 161° F. for 15 seconds in approved and properly operating equipment. Comparable temperatures and holding times may be used which will produce a negative phosphatase test.

(c) *Other dairy products.* Pasteurization of milk or cream for other dairy

products shall be at such temperatures and at holding periods as will assure proper pasteurization and sufficient to assure adequate keeping-quality and consistent with the most desirable quality of the finished product.

§ 58.159 *Product contamination.* All necessary precautions shall be taken to prevent the contamination of any dairy product.

§ 58.160 *Checking quality.* All dairy products shall be subject to inspection for quality and condition throughout each processing operation in addition to the regular routine analysis made on the raw and finished products in the laboratory to determine quality and/or composition.

§ 58.161 *Wholesomeness.* All substances and ingredients used in the processing or manufacturing of any dairy product shall be subject to inspection and shall be wholesome and practically free from impurities.

§ 58.162 *Product stability.* The methods and procedures employed in the receiving, segregating, and processing of raw materials in a plant and the storing of the finished product shall be in accordance with best commercial practices and adequate to result in a satisfactory and stable product.

§ 58.168 *Cleaning and bactericidal treatment of equipment and utensils.* The equipment, sanitary piping, and utensils used in the receiving, processing, packaging and handling of milk and milk products shall be maintained in a sanitary condition. The equipment, except that which is effectively cleaned-in-place, shall be disassembled daily for thorough cleaning. A dairy cleanser, detergent, wetting agent or sanitizing agent, or other similar materials may be used as will not contaminate or deleteriously affect the product. Steel wool or metal sponges shall not be used in the cleaning of any dairy equipment or utensils. Such equipment and utensils shall be subjected to an acceptable bactericidal or sanitizing process. After reassembly and prior to use all equipment coming in contact with milk or milk products shall be subjected to an acceptable bactericidal or sanitizing process. Utensils and portable equipment used in processing operations shall be stored above the floor in clean, dry locations, and in a self-draining position on racks constructed of impervious, corrosion-resistant material. The milk or cream cans shall be cleaned, sanitized,

and dried before returning to the producers. Can washers shall be maintained in a clean and satisfactory operating condition. Truck-tanks, sanitary piping, connections, and pumps shall be cleaned and sanitized at least once each day and more frequently as required. The outside of the truck-tanks shall be maintained in a clean and satisfactory condition.

§ 58.169 *Plant records.* Adequate plant records shall be maintained of all tests and analyses made in the laboratory or throughout the plant during processing, on all raw material and finished products. Such records shall be available for examination at any time by the inspector and kept on file for at least one year.

PACKAGING AND GENERAL IDENTIFICATION

§ 58.175 *Containers.* (a) Packages or containers used for the packing of approved dairy products shall be any commercially accepted container or packaging material which will satisfactorily protect the contents through the regular channels of trade, without significant impairment of quality with respect to flavor, contamination or moisture content under the normal conditions of handling.

(b) Due to the importance of proper treatment of parchment liners in bulk butter packages for protection against mold and other possible deterioration, the liners shall be treated as follows: The liners shall be completely immersed in a salt solution in a suitable non-corrosive container and held therein at the boiling point for not less than 30 minutes and held in this solution until used. The solution should consist of at least 15 pounds of salt for every 100 pounds of water and shall be changed each day. The lined butter boxes shall be inverted until ready for use to afford protection from possible contamination.

§ 58.176 *Packaging and repackaging.* Packaging shall be performed at the place and time of manufacture. In case of cheddar cheese, paraffining may be at factory or assembling warehouse. When officially graded bulk product is to be repackaged into consumer type packages for official grade labeling or other official identification a supervisor of packaging shall be required and the plant, equipment, facilities, and personnel shall meet the same specifications as outlined in this part, including such markings or identification as may be required.

§ 58.177 *General identification.* All commercial bulk packages containing dairy products manufactured under the provisions of this part shall be adequately and legibly marked with the name of the product, net weight, name and address of processor or manufacturer or other assigned plant identification, lot number, and any other identification as may be required. Consumer packaged product shall be legibly marked with the name of the product, net weight, name and address of packer or distributor and such other official identification as may be required.

STORAGE OF FINISHED PRODUCT

§ 58.182 *Dry storage.* The product shall be stored or so arranged in aisles, rows, or sections and lots or in such a manner as to be orderly, easily accessible for inspection or for cleaning of room. It is recommended that dunnage or pallets be used when practical. Care shall be taken in the storage of any other product foreign to dairy products in the same room, in order to prevent impairment or damage to the product from absorbed odors or vermin or insect infestation. Control of humidity and temperature shall be maintained at all times consistent with good commercial practices.

§ 58.183 *Refrigerated storage.* The finished product shall be placed on dunnage or palletized and properly identified. It shall be stored under temperatures that will best maintain the initial quality. The product shall not be exposed to anything from which it might absorb any foreign odors or be contaminated from drippage or condensation.

INSPECTION, GRADING AND OFFICIAL IDENTIFICATION

§ 58.187 *Grading.* All dairy products which have been processed or manufactured in an approved plant shall be graded by the grader in accordance with established official U. S. Standards for Grades. Laboratory analysis, when required in determining the final grade, shall be conducted only in an approved laboratory.

§ 58.188 *Inspection.* All dairy products, which have been processed or manufactured in an approved plant, for which there are no official U. S. Standards for Grades, shall be inspected for quality by the inspector in accordance with contract requirements or specifications established by the U. S. Department of Agriculture or other Federal

agency, including laboratory analysis when necessary.

§ 58.189 *Official identification.* (a) Only dairy products received, processed, or manufactured in accordance with the specifications contained in this subpart and inspected and/or graded in accordance with the provisions of this part may be identified with official identification.

(b) Sketches, proofs, or photostatic copies of all proposed packaging materials, grade labels, and inspection marks to be used as official identification shall be submitted to the Chief of the Inspection and Grading Branch, Dairy Division, Agricultural Marketing Service, U. S. Department of Agriculture, Washington, D. C., for tentative approval prior to acquisition of a supply of material bearing such identification.

(c) Finished copies, in quadruplicate, of the tentatively approved packaging materials, grade labels, and inspection marks shall be transmitted to the Chief of the Inspection and Grading Branch for final approval prior to their use as official identification.

§ 58.190 *Local or State regulations and specifications.* (a) Local or State regulations or specifications where applicable to the plant, equipment, raw material, product ingredients, facilities, sanitation or dairy products, which are higher than those specified in this subpart, shall be applicable.

(b) Local or State health requirements when higher than those specified in this subpart shall be applicable.

§ 58.195 *Explanation of terms—*(a) *Fresh and sweet.* Free from "old milk" flavor and odor of developed acidity or other off-flavors or off-odors.

(b) *Normal feed.* Regional feed flavors, such as alfalfa, clover, silage, or similar feeds or grasses (weed flavors, such as peppergrass, French weed, onion, garlic, or other obnoxious weeds, excluded).

(c) *Off-flavors or off-odors.* Flavors or odors, such as utensil, bitter, barny, or other associated defects when present to a degree readily detectable.

(d) *Developed acidity.* An apparent increase from the normal acidity of the milk to a degree of flavor and odor which is detectable.

(e) *Extraneous matter.* Foreign substances, such as filth, hair, insects and fragments thereof, and rodents and fragments thereof; and materials, such as metal, fiber, wood, and glass.

(f) *Sediment.* Fine particles of mate-

rial other than the foreign substances and materials defined in paragraph (e) of this section.

(g) *Normal cream.* Wholesome cream free from pronounced or offensive off-flavors or off-odors or abnormal conditions, such as mold, extraneous matter, or excessive sediment.

(h) *Pronounced off-flavors and off-odors.* Flavors and odors, such as stale, metallic, yeasty, and fruity.

(i) *Offensive off-flavors or off-odors.* Flavors and odors, such as chemical, oily, rancid, obnoxious weeds (peppergrass, French weed, onion, and garlic).

Done at Washington, D. C., this 8th day of November 1955.

[SEAL] FRANK E. BLOOD,
*Acting Deputy Administrator,
Agricultural Marketing Service.*

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